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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/722,429

11/28/2003

Ming-Hua Li

LIE 178

7367

7590

06/16/2004

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EXAMINER

SHAKERI, HADI

ART UNIT

PAPER NUMBER

3723

DATE MAILED: 06/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/722,429

Applicant(s)

LI ET AL.

Examiner

Hadi Shakeri

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____

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DETAILED ACTION

Claim Objections

1. Claims 1-8 are objected to because of the following informalities: "spring means" in line 11, claim 1 is objected to, it should be changed to for example, --biasing means--. Appropriate correction is required. Further "screw member" in claim 1 is considers as a "cover".

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
3. Claims 1-7 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
4. Claim 1 recites the limitation "the border" in line 3. There is insufficient antecedent basis for this limitation in the claim.
5. Regarding claim 8, the language particularly "locking", makes it appear as if a method of forming is being claimed, i.e., the socket is formed by screwing the cap or the screw member to a certain depth and the locked in placed, e.g., welded to the body (per specification), rendering the claim indefinite. Prior art is applied to socket as claimed having a cap.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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7. Claims 1, 2, 6, 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Poganski (6,349,625) in view of Schnepel (3,667,250).

Poganski meets all of the limitations of claim 1, i.e., a "socket" body (3) having an inner hole axially extended to one end thereof and a set of teeth for engaging corresponding teeth of a ratchet wheel and a biasing means (12) to force the ratchet wheel into engagement with the teeth of said socket body, except for the screw member and the arrangement of the parts as recited. Schnepel teaches a socket adapter having means to ratchet when a predetermined torque is reached with a screw member (14).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the invention of Poganski with the screw member as taught by Schnepel to change the compression of the washes to adjust the torque release limit.

Wherein the socket body has a coupling hole axially extended to and opposite end thereof.

The modified prior art (Poganski in view of Schnepel) meets the limitations of claims 6 and 7, i.e., wherein said socket body has an inner thread disposed near an outer side inside said inner hole; said screw member has an outer thread threaded into the inner thread of said socket body and wherein said screw member is fastened to said inner hole of said socket body and rotatable in said inner hole relative to said socket body to adjust the spring force of said spring means.

Regarding claim 8, Colbert meets the limitations as best understood, i.e., wherein said screw member is fastened to said inner hole of said socket body to impart a predetermined pressure to said spring means against said ratchet wheel and then locked to said socket body.

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8. Claims 1, 2, 6, 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schnepel in view of Poganski.

Schnepel meets all of the limitations of claim 1, i.e., a "socket" body (10) having an inner hole axially extended to one end thereof and a set of engaging means (b) (30) radially disposed around a border inside said inner hole (32); a ratchet wheel (32, 40) mounted in the inner hole inside said socket body, said ratchet wheel having engaging means (b) (46) radially disposed at a side thereof and adapted to engage the socket body; a screw member (14) is fastened to the inner hole of said socket body; and a biasing means (56) is mounted in the inner hole inside said socket body and stopped between said screw member and said ratchet wheel to force said ratchet wheel into engagement with the teeth of said socket body, except that the engaging means is not disclosed as teeth and tool engaging means on the opposite side of the teeth, (engaging means) is adapted for a socket wrench or alike. Poganski teaches a socket having means to ratchet when a predetermined torque is reached.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the invention of Schnepel by reconfiguring it as a tool socket as taught by Poganski to adapt the tool for different application.

Wherein the socket body has a coupling hole axially extended to and opposite end thereof.

The modified prior art (Schnepel in view of Poganski) meets the limitations of claims 6 and 7, i.e., wherein said socket body has an inner thread disposed near an outer side inside said inner hole; said screw member has an outer thread threaded into the inner thread of said socket body and wherein said screw member is fastened to said inner hole of said socket body and rotatable in said inner hole relative to said socket body to adjust the spring force of said spring means.

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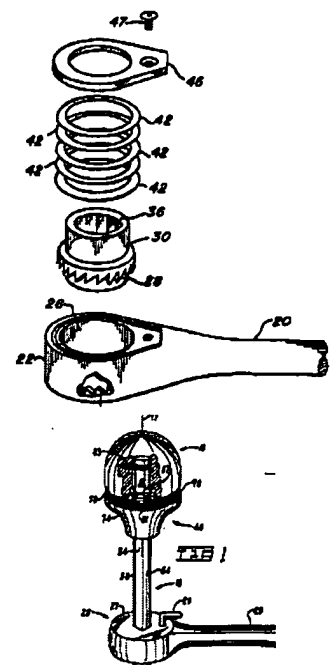
Regarding claim 8, Colbert meets the limitations as best understood, i.e., wherein said screw member is fastened to said inner hole of said socket body to impart a predetermined pressure to said spring means against said ratchet wheel and then locked to said socket body.

9. Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over prior art (Poganski in view of Schnepel and/or Schnepel in view of Poganski) as applied to claim 1 above, and further in view of Bowman (1,321,005).

Prior art as applied above meets all of the limitations of claims 3-5, except for disclosing for the teeth to have the sloping sides and the use of compression spring. Bowman teaches ratcheting teeth being biased by a spring. It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to further modify the invention of prior art with the teeth and biasing means as taught by Bowman for a smoother ratcheting action and/or less manufacturing costs.

10. Claims 1-5 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hillinger (5,595,095) in view of Rodman (3,057,096).

Hillinger meets all of the limitations of claim 1, i.e., a socket body (22) having an inner hole axially extended to one end thereof and a set of teeth radially disposed around a border inside said inner hole (32); a ratchet wheel (30) mounted in the inner hole inside said socket body, said ratchet wheel having a set of teeth (28) radially disposed at a side thereof and adapted to engage the teeth of said socket body; a screw member (a cover 46) is fastened to the inner hole of said socket body; and a biasing means (42) is mounted in the inner hole inside said socket body and stopped between said screw member and said ratchet wheel to force said ratchet wheel into



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engagement with the teeth of said socket body, except that a hole on an opposite side of the teeth, e.g., (36) upper side, in the ratchet wheel is not adapted to receive a tool but rather the workpiece, however modifying the shape of the upper hole to receive another auxiliary handle to augment the application of torque as taught by Rodman would be obvious to one of ordinary skill in the art.

Wherein the socket body has a coupling hole axially extended to and opposite end thereof.

Wherein the teeth of the body and teeth ratchet wheel each have a first sidewall and a second sidewall disposed at two sides and sloping at different angles.

Wherein the teeth of the body and teeth ratchet wheel each have a first sidewall sloping at an angle and a second sidewall disposed in vertical.

Wherein said spring means is a compression spring.


Regarding claim 8, Colbert meets the limitations as best understood, i.e., wherein said screw member is fastened to said inner hole of said socket body to impart a predetermined pressure to said spring means against said ratchet wheel and then locked to said socket body.

Conclusion

11. Prior art made of record and not relied upon are considered pertinent to applicant's disclosure. Colbert, Rendl, Newman, Beattie and Huang are cited to show related inventions.

12. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Hadi Shakeri at (703) 308-6279, FAX (703) 746-3279 for unofficial documents. The examiner can normally be reached on Monday-Thursday, 7:30 AM to 6:00 PM. All official documents may be faxed to (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist at (703) 308-1148.


Hadi Shakeri
Patent Examiner
June 12, 2004